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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/805,719 | 03/22/2004 | Carmen Flosbach | FA1170USNA | 9219 |

23906 7590 02/08/2005

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WILMINGTON, DE 19805

EXAMINER

LORENZO, JERRY A

ART UNIT PAPER NUMBER

1734

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,719

Applicant(s)

FLOSBACH ET AL.

Examiner

Jerry A. Lorengo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/22/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

(1)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 8, 9, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 01-202492 to Doi et al.

Regarding applicant claims 1, 8 and 9, Doi et al. disclose a process for the production and use of a transfer film comprising a carrier (backing); a radiation curable transparent coating on the carrier; and an image disposed on the transparent coating.

As to the transfer film and method for its manufacture, as set forth in applicant claims 1 and 8, Doi et al. disclose:

(1) Providing a carrier (backing foil) layer (English Language Translation (hereinafter, “ELT”), pages 5 and 6);

(2) Disposing on the carrier, a layer comprising a transparent radiation-curable resin (ELT, pages 6-11);

(3) Disposing on the layer of transparent radiation-curable resin, a patterned image layer (ELT, pages 12-13);

As to the method of using the transfer film, as set forth in applicant claim 9, Doi et al. disclose (ELT, pages 17 and 18):

(1) Providing a substrate;

(2) Disposing the surface of the transfer film opposite the carrier against the substrate;

(3) Removing the carrier layer; and

(4) Curing the transparent radiation-curable transfer layer.

Regarding applicant claim 2, Doi et al. disclose that the patterned image may comprise colored images formed through the use of ink applied either directly by printing or indirectly, i.e., such as by transfer (ELT, pages 11 and 12).

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Regarding applicant claims 4, 11 and 12, Doi et al. disclose that the solid, radiation-curable resin may comprise either epoxy group or vinyl group (methyl methacrylate) functionality (ELT, pages 6-8) and is curable by either UV or electron beam radiation (ELT, page 11).

(2)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 01-202492 to Doi et al. in view of U.S. patent No. 6,486,903 to Wagner.

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Doi et al., as set forth in section (1), above, disclose that the pattern layer may be provided by printing. Although they do not specifically disclose that the printing is accomplished by way of ink-jet printing, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize such a printing method in the invention of Doi et al. motivated by the fact that Wagner et al., also drawn to a process for the production and use of a transfer film comprising a carrier (backing); a radiation curable coating on the carrier; and an image disposed on the transparent coating (abstract; Figures 1-6; column 4, lines 23-42), disclose that the printing of the image may be accomplished by any known method including ink-jet (column 6, lines 50-55).

(3)

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 01-202492 to Doi et al., as set forth in section (1), above, in further view of U.S. Patent No. 5,427,997 to Oshima et al.

Doi et al., as set forth in section (1), above, disclose the use of a radiation-curable protective layer but are silent as to the inclusion of an inorganic filler, as per applicant claim 5, in an amount relative to the resin solids content.

Nonetheless, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize an inorganic filler in the radiation-curable transparent protective resin of Doi et al. motivated by the fact that Oshima et al., also drawn to methods for the protection of images utilizing a transferable radiation-curable transparent protective layer (Figure 1; column 4, lines 11-15; column 4, line 45 to column 6, line 29), disclose that the inclusion of an inorganic filler at about 10 wt% of the total resin solids content (column 24, lines 1-11) enables sufficient "film cutting" while maintaining the transparency of the protective film (column 5, lines 28-46).

(4)

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 01-202492 to Doi et al., as set forth in section (5), above, in further view of U.S. Patent No. 6,245,382 to Shvartsman et al.

Doi et al. and Oshima et al., as combined in section (3), above, disclose the utilization of a radiation-curable transparent coating which includes an inorganic filler at about 10 wt% of the total resin solids content. Although neither Doi et al. nor Oshima et al. specifically disclose the

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inclusion of an additional layer of radiation-curable transparent resin applied against the first, as per applicant claim 6, and which has the same resin solids composition as that of the first radiation-curable transparent resin layer, as per applicant claim 7, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the method resulting from the references as combined in section (3), above, with two layers of radiation-curable transparent having the same resin solids composition motivated by the fact that Shvartsman et al., also drawn to methods for the protection of images utilizing a transferable radiation-curable transparent protective layer, disclose the inclusion of more than one layer of protective coating displays a substantial improvement in protection from solvents, plasticizers, and U.V. radiation (abstract; column 21, line 66 to column 22, line 21).

(5)

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 01-202492 to Doi et al. in view of Bruns et al.

Although Doi et al. is silent as to the utilization of other curing methodologies in place of the radiation curing disclosed, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute thermal curing for the radiation curing of Doi et al. motivated by the fact that Bruns et al., drawn to the curing of transparent resins, teaches that these are conventional and equivalent means for curing "optical," i.e., transparent, resins (column 5, lines 20-25).

(6)

Claim Objections

Claims 10 and 12 are objected to because of the following informalities: Claims 10 and 12 utilize Markush-type language. Markush grouping utilizing "consisting of" requires that conjunctive rather than alternative language be used. Claims 10 and 12 utilize "or" rather than the correct "and." See MPEP § 2173.05(h). Appropriate correction is required.

(7)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry A. Lorengo whose telephone number is (571) 272-1233. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J.A. Lorengo, Primary Examiner
AU 1734
February 4, 2005